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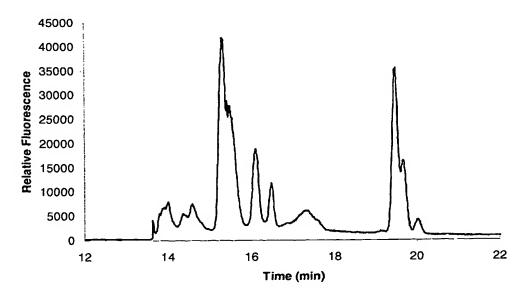
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(54) Title: MULTIPLEXED CAPILLARY ELECTROPHORESIS SYSTEMS



(57) Abstract: Multi-capillary systems for high-throughput electrophoretic separation and detection of biomolecules are disclosed. One embodiment of the invention uses galactomannans as a size-sieving matrix for multi-channel electrophoretic separations of biomolecules. Multi-color detection for the simultaneous analysis of controls and standards in the same channels as the samples, and endogenous fluorescence detection are also disclosed. Another embodiment of the invention is a two dimensional system for separation of complex samples, using multiplexed capillary electrophoresis system as the second dimension, with a fraction collection step connecting the two separation steps. The systems allow for separations to be accomplished with a highly parallel manner, or in a two-dimensional format.